

PLANNING & LEADERSHIP

Municipal EV Readiness Toolkit

2021

Southern Maine Planning & Development Commission
& Maine Clean Communities Coalition



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How to Use This Guide

As community leaders, municipalities play an important role in the electrification of our transportation system. By incorporating electric vehicle (EV) adoption into municipal and community plans, municipalities can drive forward progress. Municipalities can also lead by example, establishing policies and goals that set an example for the community and region. By working regionally and advocating for EVs, municipalities push the EV market and relevant agencies to accelerate the EV transition. This guide details the best practices for municipalities to plan for and lead the transition to EVs. It provides an overview of the current vehicle electrification goals in the State of Maine and examples of municipal planning and leadership initiatives.

Maine's Vehicle Electrification Goals

To reduce statewide emissions from transportation, the State of Maine has set ambitious vehicle electrification goals. In [Maine Won't Wait: A Four-Year Plan for Climate Action](#), the very first strategy is to “Embrace the Future of Transportation in Maine.” This strategy is broken down into three actions:

1. Accelerate Maine's Transition to Electric Vehicles;
2. Increase Fuel Efficiency and Alternative Fuels; and
3. Reduce Vehicle Miles Traveled.

More specifically, action 1, “Accelerate Maine's Transition to Electric Vehicles” sets the following goals:

- Achieve emissions reduction goals by putting 41,000 light-duty EVs on the road in Maine by 2025 and 219,000 by 2030.
- By 2022, develop a statewide EV Roadmap to identify necessary policies, programs, and regulatory changes needed to meet the state's EV and transportation emissions reduction goals.
- By 2022, create policies, incentives, and pilot programs to encourage the adoption of electric, hybrid, and alternative fuel medium- and heavy-duty vehicles, public transportation, school buses, and ferries.

These state-level goals are resulting in policies and programs that can be acted upon at the local level. Maine municipalities may use these state-level goals to guide municipal planning for EVs and can lead by example by participating in new state programs and incentives.

Planning Best Practices

Incorporating EVs and EV infrastructure into municipal planning and development activities is imperative for driving forward the transition to EVs. Developing clear targets, milestones, timelines, and responsible parties for EV strategies ensure that EV-related efforts are coordinated and impactful rather than piecemeal.

Best practices for municipal EV planning include:

1. Incorporate EVs into relevant local plans

Prioritizing EV use and the development of EV charging infrastructure in local plans enables municipal decision-making on EV-related programs and regulations. The primary policy tool available to Maine municipalities is the Comprehensive Plan. Alternatively, municipalities may choose to plan for EVs in a Climate Action Plan or a specific EV strategy or plan.

Policies for supporting EVs and EV infrastructure could fit under a single chapter in a plan (i.e., transportation) or be incorporated throughout the plan (i.e., in transportation, housing, economic development, land use, etc.). EV policies should address the strategies presented throughout the Municipal EV Readiness Toolkit, including:

1. Addressing EV infrastructure in zoning and ordinances
2. Incorporating EVs into the municipal fleet
3. Addressing EVs in permitting and inspection processes
4. Support for the development of public EV charging stations
5. Show leadership and support for EVs

Examples of plans that have incorporated EVs:

- [Cape Elizabeth, Comprehensive Plan 2019](#): “Goal 2: The town shall support transportation projects that modernize existing infrastructure” includes the recommendation to **“incorporate analysis of and response to climate change and sea-level rise in transportation project design and with the expansion of electric car charging infrastructure.”**
- [Topsham, Comprehensive Plan 2019](#): The goal “A more sustainable future” includes the strategy **“Encourage electric vehicle usage, and provide a charging kiosk at Town Hall,”** including a timeframe and designated lead and supporting departments for implementation.
- [Portland and South Portland, One Climate Future](#): The joint climate action plan’s Transportation and Land Use chapter includes an entire section detailing strategies related to the action, **“Expand electric vehicle (EV) charging infrastructure in public and private parking through public investments in chargers, updates to city land-use codes, and EV-ready requirements in the state building code.”**

2. Plan for public EV charging stations

Lack of charging infrastructure and the fear of running out of electricity are two of the largest barriers to EV adoption. While most EV charging occurs at home or work, easily accessible public EV charging stations are needed to:

- Enable EV drivers to travel to more locations and for longer trips
- Provide charging opportunities for drivers without convenient access to home charging
- Increase the confidence of potential EV purchasers from the presence and visibility of public EV charging stations

Maine municipalities must decide to what extent they should invest in publicly available EV charging infrastructure. Benefits to hosting public EV charging stations include: Avoided carbon emissions, improved public health, and highly visible “Green” branding.

Priority locations for public EV charging stations are convenient and highly visible. They are often high-traffic locations with concentrations of retail, recreation, and public services that have parking durations long enough to create opportunities for charging.

Resources for deploying public charging stations include:

- [Plug-in Electric Vehicle Handbook for Public Charging Station Hosts](#)
- [Strategic Planning to Implement Publicly Available EV Charging Stations: A Guide for Businesses and Policy Makers](#)
- [Drive Electric Vermont: Electric Vehicle Charging Station Guidebook Planning for Installation and Operation](#)



Public EV Charging stations installed at the Kittery Town Hall

3. Ensure equitable access to public EV charging infrastructure

Unequal access to EV charging infrastructure can be a limiting factor to community adoption. Low- and moderate-income drivers have less access to charging-enabled off-street parking. Municipalities can use thoughtful public EV charging station siting to ensure that investments in charging infrastructure reach these low- to moderate-income drivers, communities of color, and communities with high pollution burdens. Municipalities can also ensure that charging infrastructure investments target and prioritize underserved communities.

Resources for siting EV charging stations with equity include:

- [Siting Electric Vehicle Supply Equipment \(EVSE\) with Equity in Mind](#)
- [Expanding Zero-Emission Mobility Equity and Access](#)

4. Be aware of and take advantage of funding opportunities for EVs and EV infrastructure

The cost of owning and operating a charging station includes equipment, installation, maintenance, and electricity costs. Municipalities can reduce these costs by taking advantage of discounts and incentives from the state, federal government, or the local utility.

The [Alternative Fuels Data Center - Maine](#) website provides a list of currently available state and federal incentives. In Maine, the primary provider of EV and EV infrastructure funding is [Efficiency Maine](#). Grant funding for EV charging stations is frequently available on the [Efficiency Maine Opportunities Page](#). Maine municipalities are also eligible for [enhanced rebates for new EVs](#).



Thomaston acquired an EV police cruiser in summer 2021

Leadership Best Practices

Maine municipalities can promote EV adoption through local leadership efforts. These efforts help encourage community residents and the private sector that EV technology is advancing.

Best leadership practices include:

1. Manage municipal programs to encourage EVs and EV infrastructure

Municipalities can implement short or long-term programs to familiarize community members with EVs and encourage charging station installation. Many programs are public education efforts. These may include outreach events such as a Drive Electric event or EV parade. It may also include sharing consumer education and informational materials (such as [those available from Efficiency Maine](#)). Another important public education effort is targeted and sustained outreach to low- and moderate-income communities. Great partners for outreach events include:

- [Efficiency Maine](#)
- [Maine Clean Communities](#)
- Local dealerships
- Local community-based organizations
- Regional planning organizations
- Electrical Utility Representatives



The Town of Kittery hosted an electric street sweeper event

Example local public education efforts include:

- The Town of Wells sponsored an EV car show for [National Drive Electric Week](#) in September.
- The Town of Kittery hosted an electric street sweeper event to highlight heavy-duty EVs.
- The City of South Portland hosted an EV ride and drive event to allow residents to test out different models of EVs.

Municipalities may also develop incentive programs to support EV infrastructure expansion. The City of South Portland has a [Level 2 Electric Vehicle Charging Grant Program](#) that provides grants for public EV charging stations at businesses and workplaces throughout the city.

2. Develop municipal policies or resolves supporting EVs

One of the first steps for municipalities to become an EV leader is to make a public commitment to fleet electrification or EV support. The public commitment could take the form of a resolution, statement of support, or an executive order.

Example municipal policies include:

- [St. Louis, MO](#): The mayor signed an executive order for the priority purchase of clean municipal vehicles.
- [Louisville, KY](#): The mayor signed an executive order directing all city departments to prioritize the purchasing of electric and hybrid vehicles, green equipment, and necessary infrastructure to support the transition to electric vehicles.
- [Salt Lake City, UT](#): The city council and mayor passed a joint resolution establishing electrified transportation goals for Salt Lake City.



Maine Clean Communities hosted an EV ride and drive event in South Paris

3. Participate in EV stakeholder groups

EV technology and the landscape of state and federal incentives are rapidly changing. To stay up-to-date on technology development and EV opportunities, municipalities can participate in Maine EV stakeholder groups. These include:

- [Maine Clean Communities](#): A government/industry partnership, coordinated by the U.S. Department of Energy and administered by the Greater Portland Council of Governments, that is working to expand the use of alternative fuels. Municipalities can become stakeholders to receive technical assistance, outreach event support, and peer learning opportunities.
- [Drive Electric Maine](#): A public and private-sector EV stakeholder group that works to drive the adoption of plug-in EVs and EV charging infrastructure through state-based opportunities. The group meets quarterly to share state-level updates, car industry developments, and EV technology information.

4. Partner with other municipalities on EV infrastructure development

Maine municipalities have significant control over the development of the state's EV charging infrastructure. They determine how public EV charging stations are regulated and approved, and they often install and operate public EV charging stations themselves.

Because of their important role, it is vital that Maine municipalities work together to:

- Ensure that the EV charging station network meets the range and location needs of EV users as they drive throughout the region.
- Identify, respond to, and collaborate on funding opportunities to enhance EV adoption.
- Ensure that EV charging permitting processes are consistent throughout the region to ease permitting and inspection burdens.
- Increase the effectiveness of public education efforts throughout the region.

Examples of regional partnerships for EVs include:

- [Climate Mayors Electric Vehicle Purchasing Collaborative](#): A collaborative procurement platform for EV purchases for governments across the U.S.
- [Cities Charging Ahead](#): A peer cohort of 28 cities in Minnesota that worked together to explore electric vehicle readiness.
- [EV Purchasing Co-op \(EVPC\) Pilot, Montgomery County, MD](#): A cooperative purchasing or "group buy" program for members of the public to buy or lease electric vehicles (EV) at favorable prices through the power of volume purchasing.